

## Listing of Claims

This listing will replace all prior versions and listings of claims:

1-9. (Canceled)

10. (Currently Amended) A method for electroplating a metal on a plurality of semiconductor wafers, the method comprising:

processing the semiconductor wafers in a first station of a plurality of separate stations using a first sub-process chosen from a plurality of distinct sub-processes associated with metal electroplating; and

processing the semiconductor wafers in a second station of the plurality of separate stations using a second sub-process, distinct from the first sub-process, chosen from the plurality of distinct sub-processes associated with metal electroplating,

wherein the plurality of distinct sub-processes associated with metal electroplating include two or more of the following: wetting, initiation, seed layer repair, fill, overburden, reclaim, electroless plating, and activation processes for electroless plating, and

wherein first and second stations process the semiconductor wafers in separate baths comprising distinct electrolyte compositions; and

wherein all of the wafers processed are processed sequentially in the first and second stations.

11. (Original) The method of claim 10, wherein the metal is copper.

12. (Original) The method of claim 10, wherein the first sub-process is a fill sub-processes and the second sub-process is an overburden sub-process.

13. (Original) The method of claims 12, wherein an electrolyte employed in the fill sub-process contains between about 5 and 30 g/L copper ion, between about 8 and 180 g/L acid, between about 300 and 3000 ppm of a suppressor, and between about 2 and 50 ppm of an accelerator.

14. (Original) The method of claim 12, wherein the electrolyte employed in the overburden sub-process contains between about 20 and 40 g/L copper ion, between about 50 and 200 g/L acid, between about 5 and 500 ppm of suppressor, and between about 10 and 150 of ppm accelerator.

15. (Original) The method of claim 12, wherein the overburden sub-process employs a current density of between about 25 and 80 mA/cm<sup>2</sup>.
16. (Original) The method of claim 12, wherein the overburden sub-process takes between about 10 and 200 seconds.
17. (Original) The method of claim 12, wherein the overburden sub-process takes between about 20 and 100 seconds.
18. (Original) The method of claim 12, wherein the overburden sub-process takes between about 30 and 60 seconds.
19. (Original) The method of claim 10, further comprising transferring the semiconductor wafer from the first station to the second station.
20. (Original) The method of claim 10, wherein at least two sub-processes of the plurality of distinct processes associated with metal electroplating employ distinct current shaping apparatus.
21. (Original) The method of claim 10, wherein at least two sub-processes of the plurality of distinct processes associated with metal electroplating are chemically isolated from one another.
22. (Original) The method of claim 10, wherein wetting the semiconductor wafer is performed at an angle between about 0 and 20 degrees deviation from the plane of the wetting solution surface.
23. (Original) The method of claim 10, wherein wetting the semiconductor wafer is performed at an angle of between about 1 and 15 degrees deviation from the plane of the wetting solution surface.
24. (Original) The method of claim 10, wherein the first and second stations comprise isolated electrolytic cells.
25. (Original) The method of claim 10, wherein the first and second stations are separated by polymeric or other membrane separators.

26. (New) The method of claim 10, further comprising processing the semiconductor wafers in a third station of the plurality of separate stations using a third sub-process, distinct from the first and second sub-processes, chosen from the plurality of distinct sub-processes associated with metal electroplating, wherein the first, second and third stations process the semiconductor wafers in separate baths each comprising distinct electrolyte compositions.

27. (New) The method of claim 10, wherein the plurality of distinct sub-processes associated with metal electroplating are selected from the following: wetting, initiation, overburden, reclaim, electroless plating, and activation processes for electroless plating.